

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) In a database access system that provides access to a database in which items are arranged within item categories, a method for facilitating searches for items, the method comprising:

monitoring actions performed by a plurality of users of the database access system over time to generate user activity data that identifies search criteria specified by the users to search the database of items, and identifies items selected from the database by the users, wherein user selections of items represent accesses to item categories in which the items fall;

programmatically analyzing the user activity data to identify correlations between specific sets of search criteria and specific item categories, wherein programmatically analyzing the user activity data comprises assessing a degree to which a search query submission event and a category access event of a common user are associated;

generating a mapping structure that maps specific sets of search criteria to specific item categories based at least ~~in-part~~ in part on the correlations identified by programmatically analyzing the user activity data; and

in response to a submission by a user of a search query that includes a set of search criteria, accessing the mapping structure to identify at least one item category that is related to the set of search criteria, and suggesting the at least one item category to the user in conjunction with results of the search query.

2. (Original) The method of Claim 1, wherein the sets of search criteria consist of search strings submitted by users.

3. (Original) The method of Claim 1, wherein the sets of search criteria include search strings submitted by users.

4. (Original) The method of Claim 3, wherein the sets of search criteria further include field identifiers selected by the users to perform field-restricted searches.

5. (Original) The method of Claim 3, wherein the sets of search criteria further include item collection identifiers selected by the users to limit searches to specific collections of items.

6. (Original) The method of Claim 1, wherein programmatically analyzing the user activity data comprises generating, for a given set of search criteria and a given item category, a

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score that reflects a frequency with which users who submitted the given set of search criteria also selected an item falling within the given item category.

7. (Original) The method of Claim 1, wherein programmatically analyzing the user activity data comprises identifying, for a given set of search criteria, which of a plurality of item categories were accessed the most frequently by users who submitted the given set of search criteria, wherein user selection of an item is treated as an access to a corresponding item category.

8. (Original) The method of Claim 1, wherein programmatically analyzing the user activity data comprises taking into consideration a plurality of different types of item selection actions that are reflected in the user activity data.

9. (Original) The method of Claim 8, wherein programmatically analyzing the user activity data further comprises according different weights to different types of item selection actions.

10. (Original) The method of Claim 1, wherein the item categories include categories of a hierarchical browse structure that is accessible to the users.

11. (Original) The method of Claim 10, wherein the correlations take into consideration item selection actions performed by users during browsing of the hierarchical browse structure.

12. (Original) The method of Claim 10, wherein the correlations take into consideration browse category selection actions performed by users during browsing of the hierarchical browse structure.

13. (Original) The method of Claim 1, wherein programmatically analyzing the user activity data comprises identifying, for a given search query submission event within an event history of a user, a subset of item selection events within the event history that are sufficiently proximate to the search query submission event to be treated as related to the search query submission event.

14. (Original) The method of Claim 1, wherein programmatically analyzing the user activity data comprises dividing the user activity data into a plurality of segments that correspond to specific time intervals, analyzing the segments separately from one another to generate multiple correlation result sets, and combining the multiple correlation result sets.

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15. (Original) The method of Claim 1, wherein suggesting the at least one item category to the user comprises displaying, on a search results page, a link to page that corresponds to the item category.

16. (Original) The method of Claim 1, wherein at least some of the categories represented within the mapping structure are represented in terms of item attributes used to categorize items.

17. (Currently Amended) A system for detecting associations between sets of search criteria and categories of items, the system comprising:

a server system that provides browsable and searchable access to an electronic catalog of items;

a monitoring component that monitors and records search query submissions and selection actions of users of the electronic catalog to generate user activity data; and

an analysis component that collectively analyzes the user activity data associated with a plurality of users to identify associations between specific sets of search criteria and specific item categories, wherein the analysis component takes into consideration, for purposes of identifying said associations, amounts of time spent by users between particular search query submissions and particular selection actions.

18. (Original) The system of Claim 17, wherein the sets of search criteria consist of search strings submitted by users.

19. (Original) The system of Claim 17, wherein the sets of search criteria include search strings submitted by users.

20. (Original) The system of Claim 17, wherein the analysis component generates, for a given set of search criteria and a given item category, a score that reflects a frequency with which users who submitted the given set of search criteria also selected an item falling within the given item category.

21. (Original) The system of Claim 17, wherein the analysis component identifies, for a given set of search criteria, which of a plurality of item categories were accessed the most frequently by users who submitted the given set of search criteria, wherein user selection of an item is treated as an access to a corresponding item category.

22. (Original) The system of Claim 17, wherein the analysis component takes into consideration a plurality of different types of item selection actions that are reflected in the user activity data.

23. (Original) The system of Claim 17, wherein the item categories include browse categories of a hierarchical browse structure of the electronic catalog.

24. (Original) The system of Claim 23, wherein the associations identified by the analysis component reflect item selection actions performed by users during browsing of the hierarchical browse structure.

25. (Original) The system of Claim 23, wherein the associations identified by the analysis component reflect browse category selection actions performed by users during browsing of a hierarchical browse structure of the electronic catalog.

26. (Original) The system of Claim 17, wherein the analysis component identifies, for a given search query submission event within an event history of a user, a subset of item selection events within the event history that are sufficiently proximate to the search query submission event to be treated as related to the search query submission event.

27. (Original) The system of Claim 17, wherein the analysis component divides the user activity data into a plurality of segments that correspond to specific time intervals, analyzes the segments separately from one another to generate multiple correlation result sets, and combines the multiple correlation result sets.

28. (Original) The system of Claim 17, wherein the server system uses the associations identified by the analysis component to select item categories to display on search results pages.

29. (Currently amended) A method of processing query submissions, comprising:

receiving a user submission of a set of search criteria for searching a database of items;

identifying a set of items within the database that are responsive to the set of search criteria;

accessing a mapping structure to look up ~~at least one~~ an item category that, based on an automated analysis of user event histories, has been accessed relatively frequently by users who have previously submitted the set of search criteria; ~~and~~

responding to the user submission by generating and returning a search results page that lists the responsive items, ~~and the at least one~~ said search results page including a selectable category link for accessing a category page associated with said item category looked up from the mapping structure; and

subsequently, generating a data value that represents a degree of association between the set of search criteria and the item category, said data value reflecting whether the user selected said category link on the search results page.

30. (Currently Amended) The method of Claim 29, wherein the set ~~if~~ of search criteria comprises a search term.

31. (Currently Amended) The method of Claim 29, wherein the set ~~if~~ of search criteria additionally comprises at least one of the following: (a) an identification of a search field for performing a field-restricted search; (b) an identification of a collection of items to be searched.

32. (Original) The method of Claim 29, wherein the set of search criteria comprises a plurality of search terms.

33. (Currently Amended) The method of Claim 29, wherein the set ~~if~~ of search criteria consists of a single search term.

34. (New) The method of Claim 1, wherein assessing the degree to which the search query submission event and the category access event are associated comprises taking into consideration a number of clicks performed by the user between the search query submission event and the category access event.

35. (New) The method of Claim 34, wherein taking into consideration a number of clicks performed further comprises comparing the number of clicks to a threshold, said threshold being greater than one click.

36. (New) The method of Claim 1, wherein assessing the degree to which the search query submission event and the category access event are associated comprises taking into consideration the amount of time between the search query submission event and the category access event.

37. (New) The method of Claim 1, wherein assessing the degree to which the search query submission event and the category access event are associated comprises taking into

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consideration whether the user submitted an intervening search query between said search query submission event and said category access event

38. (New) The method of Claim 1, wherein the category access event is one of the following types of events: selection of an item for viewing, a selection of an item to download, an addition of an item to a shopping cart, a purchase of an item, a submission of a review or rating of an item.

39. (New) The method of Claim 17, wherein the selection actions comprise at least one of the following types of actions: a selection of an item for viewing, a selection of an item to download, an addition of an item to a shopping cart, a purchase of an item, a submission of a review or rating of an item.

40. (New) The method of Claim 17, wherein the analysis component further takes into consideration, for purposes of identifying said associations, numbers of clicks that occurred between particular search query submissions and particular selection actions.

41. (New) The method of Claim 17, wherein the analysis component assesses whether a user's selection action is related to a prior search query submission by the user based, at least in part, on whether the user submitted an intervening search query between said search query submission and said selection action.

42. (New) The method as in Claim 29, wherein the method comprises using the set of search criteria to look up a plurality of item categories from the mapping structure, and including a respective category link on the search results page for each of the plurality of item categories.